Claims

1. A printing blanket (14, 29) having a dimensionally-stable support plate (21), whose ends can be fixed in place on a transfer cylinder (03), and having a coating (22) which constitutes the shell face of the transfer cylinder (03), characterized in that a depression (19, 32) has been arranged between the ends of the printing blanket (14, 29).

2. The printing blanket in accordance with claim 1, characterized in that at least one depression (19) has been cut in the form of a groove into the printing blanket (14, 29).

3. The printing blanket in accordance with claim 2, characterized in that the depression (19) has been cut into the coating (22) of the printing blanket (14, 29).

4. The printing blanket in accordance with claim 2, characterized in that the depth (26) of the groove (19) corresponds to approximately 5% to 15% of the total thickness of the coating (22).

5. The printing blanket in accordance with claim 2, characterized in that the groove (19) is arranged approximately centered between the leading end and the trailing end of the printing blanket (14, 29), in particular between the leading lateral edge (23) and the trailing lateral edge (24) of the coating (22) of the printing blanket (14, 29).

6. The printing blanket in accordance with claim 1, characterized in that the width (27) of the depressions (19) in the circumferential direction approximately corresponds to 0.1% to 1% of the length of the printing blanket (14, 29) in the circumferential direction.

7. The printing blanket in accordance with claim 1, characterized in that the depression (19) has been worked in the form of a deformation into the support plate (21).

8. The printing blanket in accordance with claim 1, characterized in that the depression (19) has been worked in the form of a reduction in depth into the support plate (21).

9. The printing blanket in accordance with claim 7, characterized in that the deformation has been produced to be dimensionally-stable.

10. The printing blanket in accordance with claim 9, characterized in that the deformation can be stamped-in by means of a die, for example a lower die (33).

11. The printing blanket in accordance with claim 7, characterized in that the deformation can be made prior to the application of the printing blanket (14, 29) to a transfer cylinder (03).

12. The printing blanket in accordance with claim 10 or 11, characterized in that the deformation can be made by means of a lower die (33) and an upper die (34).

13. The printing blanket in accordance with claim 1, characterized in that the deformation can be made in the support plate (21) prior to the application of the printing blanket (14, 29) to the dimensionally-stable support plate (21).

14. The printing blanket in accordance with claim 1, characterized in that the deformation can be made in the dimensionally-stable support plate (21) with the printing blanket (14, 29) already applied to it.

15. The printing blanket in accordance with claim 1, characterized in that the depression (19) has a depth (26) between 0.1 mm to 0.5 mm.

16. The printing blanket in accordance with claim 1, characterized in that the depression (19) has a depth (26) between 0.2 mm to 0.3 mm.

17. The printing blanket in accordance with claim 1, characterized in that the depression (19) has a sweep of 0 mm to 1 mm.

18. The printing blanket in accordance with claim 1, characterized in that the depression (19) has a width (27) of 3 mm to 8 mm.

19. The printing blanket in accordance with claim 1, characterized in that the printing blanket (14, 29) has been applied to a transfer cylinder (03, 28), and the transfer cylinder

(03, 28) also has a depression (36) in the area of the depression (19, 32) of the printing blanket (14, 29).

20. The printing blanket in accordance with claim 19, characterized in that the depression (36) of the transfer cylinder (03, 28) has been cut into the barrel of the transfer cylinder (03, 08).

21. The printing blanket in accordance with claim 19, characterized in that the depression (36) has been made in or between an underlayer (31) arranged on the barrel of the transfer cylinder (03, 28), for example as glued-on foils.

22. The printing blanket in accordance with claim 1, characterized in that two printing blankets (14, 29) are arranged in the axial direction of the transfer cylinder (03).

23. The printing blanket in accordance with claim 1, characterized in that the depressions are arranged to be offset in the circumferential direction, for example by 180°.

24. The printing blanket in accordance with claim 1, characterized in that a plate cylinder (02) works together with the transfer cylinder (03), wherein a circumference of the transfer cylinder (03) is a whole number multiple of the circumference of the plate cylinder (02).

25. The printing blanket in accordance with claim 24, characterized in that the plate cylinder (02) has a printing plate (04) on the circumference.

26. The printing blanket in accordance with claim 25, characterized in that the plate cylinder (02) has four printing plates (04) in the axial direction.

27. The printing blanket in accordance with claim 24, characterized in that a dampening system is assigned to the plate cylinder (02).

28. A method for producing a printing blanket (14) with a dimensionally-stable support plate (21), characterized in that, prior to being applied to a transfer cylinder (03) arranged in a printing press, the dimensionally-stable support plate (21) is provided with a depression (19).

29. The method in accordance with claim 28, characterized in that the support plate (21) is deformed by means of a die, for example a lower die (33).

30. The method in accordance with claim 28, characterized in that the support plate (21) is deformed by means of a lower die (33) and an upper die (34).

31. The method in accordance with claim 29 or 30, characterized in that the deformation is made prior to the

application of the printing blanket (14, 29) to a transfer cylinder (03).

32. The method in accordance with claim 29 or 30, characterized in that the deformation in the support plate (21) is made prior to the application of the printing blanket (14, 29) on the dimensionally-stable support plate (21).

33. The method in accordance with claim 28, characterized in that the support plate (21) is deformed together with the already applied printing blanket (14).

34. A printing group (01) for a printing press without a dampening unit, having a plate cylinder (02), wherein the plate cylinder (02) has at least two waterless planographic printing plates (04) in the circumferential direction, characterized in that only one opening is arranged on the circumference of the transfer cylinder (03) for receiving a single printing blanket (14, 29), and this opening is located opposite respective ends (17) of planographic printing plates (04), and a depression (19) on the shell face of the printing blanket (14, 19) is located opposite the other ends (17) of these planographic printing plates (04).

35. The printing group (01) in accordance with claim 34, characterized in that at least two printing blankets (14, 29) are arranged side-by-side in the axial direction on the transfer cylinder (03).

36. The printing group (01) in accordance with claim 34, characterized in that the depression (19) extends parallel in respect to the longitudinal axis of the transfer cylinder (03).

37. The printing group (01) in accordance with claim 34, characterized in that the transfer cylinder (03) has at least one printing blanket (14) with a dimensionally-stable support plate (21), whose ends can be fixed in place on the transfer cylinder (03), and a coating (22), which is fixed on the support plate (21_ and constitutes the shell face of the transfer cylinder (03).

38. The printing group (01) in accordance with claim 34, characterized in that a coating (22) of the planographic printing plate (04) has a lower layer (07) and an upper layer (08).

39. The printing group (01) in accordance with claim 38, characterized in that the lower layer (07) is formed from an ink-absorbing material and the upper layer (08) of an ink-repelling material.

40. The printing group (01) in accordance with claim 39, characterized in that the ink-repelling material is a silicon-containing material.

41. The printing group (01) in accordance with claim 38, characterized in that the upper layer (08) has openings (12) in the areas of the print image which are to be imprinted.

42. The printing group (01) in accordance with claim 38, characterized in that the upper layer (08) covers the lower layer

(07) in the areas of the print image which are not to be imprinted.

43. The printing group (01) in accordance with claims 34 or 37, characterized in that a depression (15) is formed by the distance between the leading end and the trailing end of the printing blanket (14, 29), in particular by the distance between the leading lateral edge (23) and the trailing lateral edge (24) of the coating (22) of the printing blanket (14, 29).

44. The printing group (01) in accordance with claim 43, characterized in that the depression (15) extends parallel with the longitudinal axis of the transfer cylinder (03).

45. The printing group (01) in accordance with claim 34, characterized in that at least one depression (19) has been cut in the form of a groove into the printing blanket (14, 29).

46. The printing group (01) in accordance with claim 34 or 37, characterized in that the depression (19) has been cut into the coating (22) of the printing blanket (14, 29).

47. The printing group (01) in accordance with claim 34, characterized in that the depth (26) of the groove (19) approximately corresponds to 5% to 15% of the total thickness of the groove (22).

48. The printing group (01) in accordance with one of claims 34 to 38, characterized in that a groove (19) is arranged approximately centered between the leading end and the trailing

end of the printing blanket (14, 29), in particular between the leading lateral edge (23) and the trailing lateral edge (24) of the coating (22) of the printing blanket (14, 29).

49. The printing group (01) in accordance with claim 31, characterized in that the width (27) of the depressions (19) in the circumferential direction corresponds approximately to 0.1% to 1% of the length of the printing blanket (14, 29) in the circumferential direction.

50. The printing group (01) in accordance with claim 37, characterized in that the support plate (21) is made of metal.

51. The printing group (01) in accordance with claim 50, characterized in that the metal is designed as a sheet metal plate.

52. The printing group (01) in accordance with claim 35, characterized in that the support plate (21) is made of special steel.

53. The printing group (01) in accordance with claim 35, characterized in that the coating (22) of the printing blanket (14, 29) is made of rubber.

54. The printing group (01) in accordance with claim 53, characterized in that the rubber is designed as a multi-layered rubber material.

55. The printing group (01) in accordance with claim 34 or 37, characterized in that the coating (22) of the printing blanket (14, 29) has a ground surface.

56. The printing group (01) in accordance with claim 34 or 37, characterized in that the transfer cylinder (28) has a printing blanket (29) whose ends can be fixed in place on the transfer cylinder (28), wherein an underlayer (31) is arranged between the printing blanket (29) and the transfer cylinder (28), wherein the underlayer (31) has at least one break or cross-sectional reduction in the circumferential direction for forming a depression (32).

57. The printing group (01) in accordance with claim 56, characterized in that a single printing blanket (29) is arranged in the axial direction on the transfer cylinder (28).

58. The printing group (01) in accordance with claim 37 or 56, characterized in that a plurality, in particular two or three, printing blankets (14, 29) are arranged side-by-side in the axial direction on the transfer cylinder (03, 28).

59. The printing group (01) in accordance with claim 34, characterized in that a single planographic printing plate (04) is arranged in the axial direction on the plate cylinder (02).

60. The printing group (01) in accordance with claim 34, characterized in that a plurality, in particular two or four or six, planographic printing plates (04) are arranged side-by-side in the axial direction on the plate cylinder (02).

61. The printing group (01) in accordance with claim 34, characterized in that the size of a planographic printing plate (04) corresponds to a newspaper page.

62. The printing group (01) in accordance with claim 34, characterized in that the plate cylinder (02) and/or the transfer cylinder (03) can be temperature-controlled.

63. The printing group (01) in accordance with claim 62, characterized in that the plate cylinder (02) and/or the transfer cylinder (03) can be temperature-controlled from the inside.

64. The printing group (01) in accordance with claim 34, characterized in that the plate cylinder (02) and/or the transfer cylinder (03) can be temperature-controlled by means of a heat carrier circulating in conduits (16).

65. The printing group (01) in accordance with claim 62 or 64, characterized in that the plate cylinder (02) and/or the transfer cylinder (03) can be temperature-controlled by means of a fluid.

66. The printing group (01) in accordance with claim 62, 64 or 65, characterized in that the temperature control of the plate cylinders (02) and or of the transfer cylinders (03) depends on the circumferential speed of the plate cylinder (02) and/or the circumferential speed of the transfer cylinder (03).

67. The printing group (01) in accordance with claim 60, characterized in that openings of the plate cylinder (02) for

receiving ends (07) of the planographic plates (14) are aligned in the axial direction.